A Harman International Company

SR 4000

UHF Receiver

Description

a) Hardware

The SR 4000 UHF receiver is one standard EIA rack unit high and one-half rack unit wide with a full metal chassis. Thus, two receivers can be placed side-by-side in one rack space (rack-mount hardware included). The SR 4000 has a 30 MHz wide UHF band containing presets with intermodulation-free frequencies as well as a tuning mode with access to up to 1,200 switchable frequencies. The SR 4000 operates as a true diversity receiver, in which two completely separate antennae, receiver and demodulator sections are operational at all times. The receiver includes a Pilot Tone Decoder Unit that decodes transmitter data out of the Pilot Tone's data stream. This enables the SR 4000 to show battery charge status and mute status of the transmitter on the integrated, back-lit color display. This data is also available at the Logic Output Connector on the rear panel. The HT4000 & PT4000´s Pilot Tone allows automatic muting of the SR´s audio output in case of invalid or corrupted signal (Tone Code Squelch TCSQ). If necessary this automatic squelch option can be overruled by a manual squelch setting. For PC control and monitoring of the SR unit a special data port is available on the rear panel of the SR 4000.

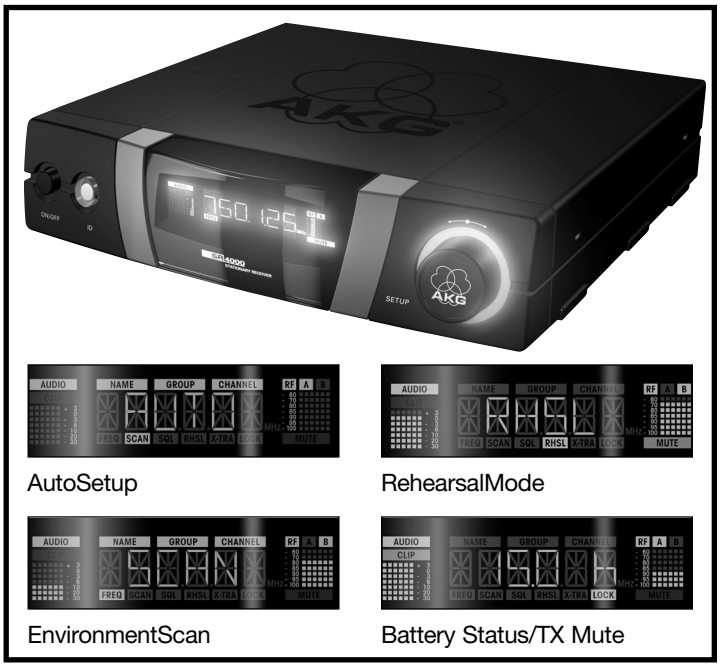
The True Diversity receiver concept offers maximum dynamic range, greater freedom from interference and noiseless switching from one receiver to the other. Both balanced 3-pin XLR and unbalanced 1/4-inch output connectors are available. An output level switch allows the adjustment of 3 output levels (-30, 0, +6 dB) for optimum system gain structure. Also available on the rear panel are a data port connector, a logic output, 2 x BNC antenna Connectors and a lockable DC input jack.

Controls on the SR 4000 include a backlit display and a Jog wheel to adjust various receiver settings such as squelch threshold, carrier frequency selection, user's name, scan & rehearsal mode selection and many more. Indicators on the unit include mute, audio level bargraph, RF level bargraph, 6x14 segment alphanumeric display and menu control. A unique, programmable Status Control Ring shows the most important system data at one glance.

Each SR 4000 can accommodate a pair of diversity antennas; however, when a number of receivers are used in a single system, a master antenna pair (with or without antenna booster, directional and omnidirectional antennas) can be used to feed all receivers. A wide range of accessories such as an antenna splitter, antenna multi-coupler and antenna booster are available for operational flexibility and ease of installation.

b) Software

The internal software of the SR 4000 offers a wide range of control features for an easy setup even in complex multi-channel systems under difficult RF conditions. Most helpful are features like AutoSetup (automatic intermodulation free channel selection), EnvironmentScan (scanning of the unit's RF range), and RehearsalMode (recording of important system data during rehearsal helps optimize the system setup). Important settings like frequency, squelch, unit name, etc. can be edited and stored via an easy menu structure. Even more control & monitoring features are available via the optional MCS 4000 (MissionControl Software) PC Control Software.



AutoSetup

RehearsalMode

EnvironmentScan

Battery Status/TX Mute

Features

- **Wideband true-diversity frequency-agile UHF receiver with 1,200 channels and all-metal chassis**
- **Factory-selected, pre-matched frequency groups for quick system setup**
- **Backlit color LCD allows easy monitoring of operating parameters at a glance**
- **Jog wheel control allows quick, easy parameter adjustments**
- **AutoSetup, EnvironmentScan and Rehearsal Modes for quick, easy system setup**
- **Bodypack and handheld transmitters available with a wide selection of AKG microphones**
- **Up to 18 intermodulation-free frequencies on each 30 MHz frequency band**
- **Wide range of optional accessories available for system customization**

Specifications

RF Carrier Frequency Ranges: 650 – 790 MHz

Carrier Frequencies: up to 1,200 per range (dependent on local conditions)

Modulation Method: FM

Rated Deviation: 20 kHz at 1 kHz (sine wave)

Squelch Threshold: Adjustable between -80 and -100 dBm

Audio Bandwidth: 35–20,000 Hz

THD at 1 kHz: < 0.3% at rated deviation

Signal-to-noise: typ. 120 dBA

Audio Output: Balanced 3-pin XLR-male, switchable from -30 to +6 dB; unbalanced 6.5 mm (1/4-in.) jack

Current Consumption: 400 mA typical

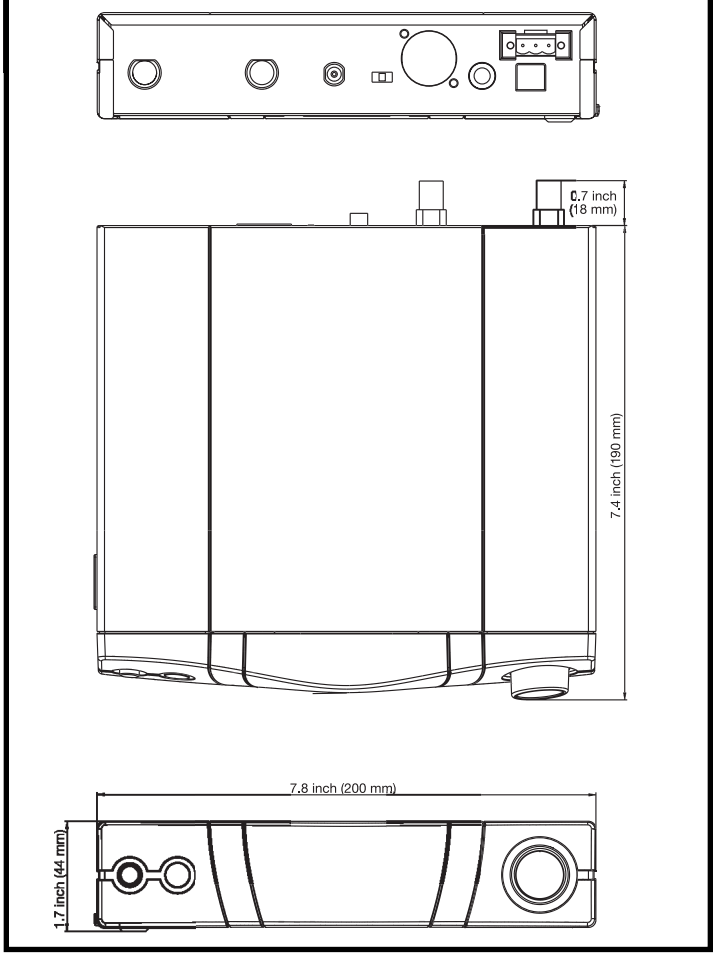
Power Requirement: 11 to 15 V dc or ac from external power supply

Size: 7.8 x 7.4 x 1.7 in. (200 x 190 x 44 mm)

Net Weight: 34 oz. (972 g)

Standard Accessories: RMU 4000 Rackmount kit
2 - 1/4 wave antennae
power supply

Graphical Data



Architects and Engineers Specifications

The wireless receiver shall operate over a 30 MHz UHF frequency range in one of 4 bands from 650 MHz to 790 MHz, with a wide range of possible frequency settings. The wireless microphone system shall incorporate factory-optimized sets of both sending and receiving frequency modules that are built into both transmitters and receivers. Each frequency set shall comprise a 30 MHz UHF band and offer up to 1,200 discrete operating frequencies within that band. The receiver shall operate on the true diversity principle, and the switching circuit shall be inaudible. Total harmonic distortion at 1 kHz for rated deviation shall be no greater than 0.3%. The receiver shall provide for a manual squelch adjustment as well as an automatic squelch option (tone code squelch) for optimum system operation. Audio output shall include a balanced XLR connector as well as an unbalanced 6.3 mm / 1/4-inch jack connectors. The output from the 3-pin XLR-type connector shall be adjustable in 3 steps (-30, 0, +6 dB). A data port for connecting a pc-controlled network and logic out connector shall be provided. The receiver shall be controlled by a jog wheel and shall provide a backlit color display as well as a programmable LED ring (red/green) showing the overall system status.

The wireless receiver shall be the AKG Acoustics Model SR 4000.

Limited Warranty

Valid only in the United States. AKG Acoustics warrants AKG products against defects in material or workmanship for a period of two years from the date of original purchase for use, and agrees to repair or, at our option, replace any defective unit without charge for either parts or labor. Important: This warranty does not cover damage resulting from accident, misuse or abuse, lack of reasonable care, the affixing of any attachment not provided with the product, loss of parts or connecting the product to any but the specified receptacles. This warranty is void unless service or repairs are performed by an authorized service center. No responsibility is assumed for any special, incidental or consequential damages. However, the limitation of any right or remedy shall not be effective where such is prohibited or restricted by law. Simply take or ship your AKG product prepaid to our service department. Be sure to include your sales slip as proof of purchase date. (We will not repair transit damage under the no-charge terms of this warranty.) Note: No other warranty, written or oral is authorized by AKG Acoustics, Inc. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitation on how long an implied warranty lasts, so the above exclusions and limitation may not apply to you.

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H A Harman International Company

AKG Acoustics GmbH
Lemböckgasse 21–25, P.O.B. 158, A-1230
Vienna/AUSTRIA
Tel: (43 1) 86 654-0*, Fax: (43 1) 86 654-516
Internet: http://www.akg.com

AKG Acoustics
Bodenseestraße 228, D-81243 München/GERMANY
Tel: (089) 87 16-0, Fax: (089) 87 16-200

Arbiter Pro Audio
Wilberforce Road, London NW9 6AX/ENGLAND
Tel: (0181) 202 1199, Fax: (0181) 202 7076

AKG ACOUSTICS, U.S.
914 Airpark Center Drive
Nashville, TN 37217, U.S.A.
Tel: (615) 620-3800, Fax: (615) 620-3875

Japan ALL ACCESS INC. (Pro)
No. 21, Sandanchi, Hongo, Jimokuji, Ama, 490-11 Aichi,
www.allaccess.co.jp
Cozy Hattori, Phone: +81 52 443 5537, Fax: +81 52 443 7738

Erikson Pro Audio
620 McCaffrey, St-Laurent, Quebec, H4T 1N1, CANADA
Tel: (514) 738-3000, Fax: (514) 737-5069
Internet: www.jam-ind.com/eriksonpro

AKG is constantly improving and modifying its products, therefore, specifications are subject to change without notice.